

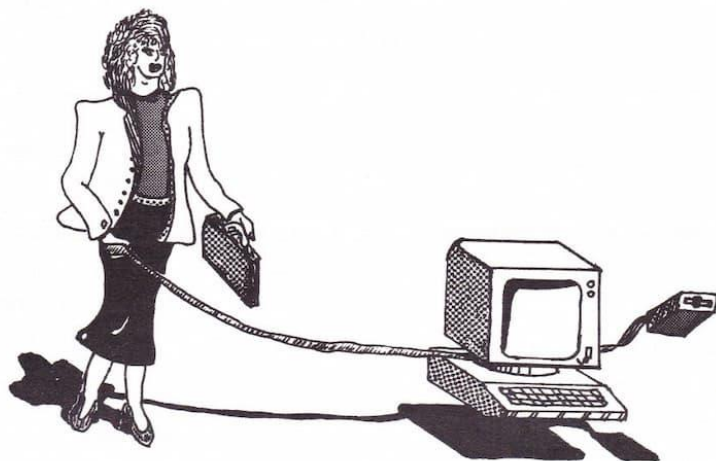
OTTAWA HOME COMPUTING

The NEWSLETTER of the
OTTAWA HOME COMPUTING CLUB

January, 1987

Vol. 3, No. 7

\$2.00



WOMEN AND THE HOME/OFFICE COMPUTER

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LYNX

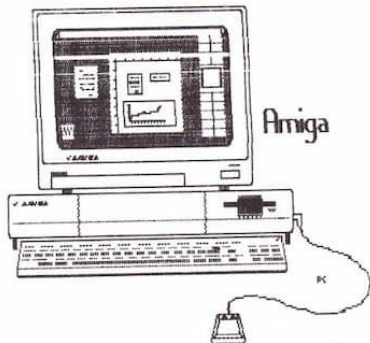
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OTTAWA HOME COMPUTING

OTTAWA HOME COMPUTING is the newsletter of the Ottawa Home Computing Club. Membership is open to all with a genuine interest in personal computing for \$20/year in Canada. Membership includes OTTAWA HOME COMPUTING, which is published 10 times a year. Meetings are usually held on the third Monday of each month, 7:30 p.m. at Charlebois High School, corner of Heron Road and Alta Vista Drive in Ottawa.

When submitting articles, please type or write legibly on 8 1/2 by 11 inch paper, double spaced. Articles may also be submitted on disk, or in a "print-ready" format. Contact the editor for more information.

Permission to reprint articles appearing herein is hereby granted, provided credit to both the author and Ottawa Home Computing is given.

Advertisements of personal items up to 25 words for one insertion per issue are free to members. Inquire for commercial rates.

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EDITORIAL by Bob Mason

I had to go to 16 pages to be able to feel free to babble on forever. That's a good sign because a year ago, I had to babble on just to fill 12 pages.

It may seem fiscally irresponsible to be printing 16 pages at the same time as we're crying poor mouth and increasing the club dues to \$20. But the goal of the executive is to develop the Newsletter as an attractive vehicle for advertisers and also to newsstand buyers.

First of all, I'm typing this on my Christmas present to myself, a C-128. And so far, it's worked out perfectly -- no problems in C-64 mode. I've been able to produce the Newsletter, copy every program I have, etc. I hope to be taking advantage of 128 mode and CP/M in the future, but so far, the transition to the C-128 has cost me nothing in software.

I'd like to welcome aboard our newest advertiser, Lynx Technical Services. Both they and Maccom offer full Commodore support. And both would welcome your patronage.

I'd also like to direct people to some of the articles in this issue. If you were at the last meeting, and had some doubts about "Photographing the Screen", you can rest assured that the article was correct. See note on page 6. The club is involved in producing a one hour a month TV show. See note in the **President's Corner**, page 4. The **Newsletter** is looking for staff, and will be having a meeting of interested people January 26. See ad on page 15 for details.

Also there's a financial report on page 7. The article announces a raise in dues to \$20 for the new year. One thing that article neglected to mention was that members will now receive a disk containing notes on the club and a catalogue of the software available in the library. So when you join, or renew your membership, you'll be asked

continued on page 14

PRESIDENT'S CORNER

by Pierre Castricum

The month of December has been a very busy time for most of us. With Christmas time here once more, our lives have been taken over with parties, shopping, and of course, time to reflect upon the year nearly ended.

The World of Commodore show held in Toronto in the early part of December is now history. A number of O.H.C.C. members attended the show; everyone that I have spoken with has agreed that it was well worth the four and a half hour car ride. Most dealers offered specials on both software and hardware. I was able to purchase a four-program package; the programs included PAPERCLIP (word processor), the "New" CONSULTANT (data base), CAL-KIT (spreadsheet) and CHECKBOOK (one of the home organizer series) all for the incredible price of \$30.00, easily \$250.00 retail!

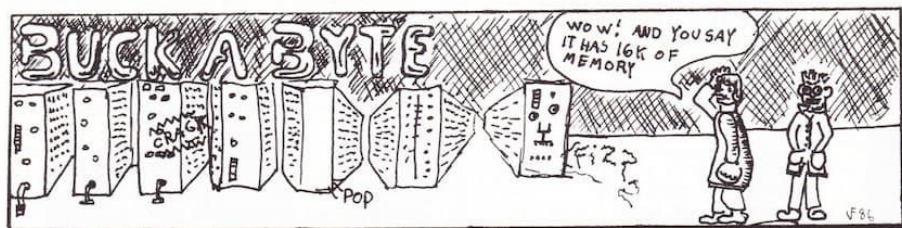
On December 16th, the O.H.C.C. together with the Atari and IBM user groups, took part in a new television program which aired on the Skyline and Ottawa cable channels (12). The program, called "The Whole Bit", is based on the very successful "Bits & Bytes" show on TV Ontario. The program was hosted by our own Scotty Adams and Jan Frajkor. (Congratulations to Jan, who did a lot of work to get this show going). Several members of the viewing audience partici-

cipated in a phone-in segment of the program. The program originates live from the Skyline Cable studios on St. Laurent Blvd. and can be viewed on cable channel 12 of either Skyline or Ottawa Cablevision. The next program will be Tuesday, January 20, at 10 p.m. on both Skyline and Ottawa Cablevision, and Skyline will repeat the show Wednesday, Jan. 21 at 3 p.m. and Friday, Jan. 23 at 4:30 p.m. The Friday slot is tentative, and may be moved to Saturday, especially if audience reaction is positive.

The games night slated for February 16th has been postponed to a later date. In its place, Mr. Rich McIntyre, President and General Manager of Commodore Canada, has agreed to be our speaker at the February meeting. I am sure that he will provide us with an "inside" view of Commodore's future. I would suggest that you circle February 16th on your calendar as a meeting that you shouldn't miss.

I have been advised by Peter Nickless that the C-128 disk of the month was "selling like hot cakes" at the last meeting. Members are reminded that all librarians will accept public domain programs for inclusion on the disks of the month (and you get a free disk of the month in return).

On behalf of the members of the executive, may I wish everyone a very happy and prosperous new year!



1950 COMPUTER

BY VOTA FRYZBK

MEETING SCHEDULE

The following is the list of meeting dates for the next year. Dates marked with an asterisk do not fall on the third Monday of the month.

1987

January 19	February 16
March 23*	April 27*
May 18	June 15
July 20	August 17

AGENDA

January 19 Meeting

7:30 Disk of the Month
Membership Sales
Socialization
Movies for the Kids (Room 230)

8:00 Business Meeting

8:10 Introduction of Speakers

8:30 "Getting Started" (Room 225)
"Demystifying the Buzzwords" (Room 224)
"Networking -- The Computer as an
Information Tool" (Room 223)
"Children and the Home/School
Computer" (Room 221)
"How to Get the Most Out of an
Overbearing, Condescending
Computer Sales Rep." (Room 215)

9:00 The above topics will be repeated
& at 9 and 9:30. Please help to end
9:30 each session at the appointed time
so that the next group can start
without excessive delay.

In addition, the following Librarians (or
their representatives) will be available
for your questions:

Librarian

Room

Apple & Mac

Room 227

Browse through the library, order disks,
discuss applications, problems, etc.

Commodore and Disk of the Month Room 219
Same as above, but for Commodore. Carl

Bigras is our Commodore librarian and will
gladly help you out with any problems you
might have.

Amiga

Room 208

Don White has put together a number of
disks of public domain software for the
Amiga. You can buy the disks, watch his
demos, and ask questions.

C128,CP/M

Room 210

Peter Nickless has a rapidly increasing
library of C128 and CP/M software. If
you've got a C128, drop in and say Hi.

UPCOMING MEETINGS

January 19, 1987

Women and the Home/Office Computer

(see articles elsewhere in this issue;
for topics, see agenda)

February 16

Rich McIntyre, President and General
Manager of Commodore Canada will be our
special guest speaker. Rich will undoubtedly
talk about future directions in home
computing, and how Commodore sees itself
within that vision. It will be our role to
question the vision, relay our wants and
needs, give feedback so that the company
has a real basis for its decision-making
and future planning.

March 23

Computer Games. After the business meeting
there will be a demonstrations of the
various game software available for Apple
and Commodore computers. We still need
volunteers to bring in their computers, and
volunteers to bring in software and demon-
strate it. If you are willing to do either
please contact Wayne Schaler or any other
executive member. Your help is needed to
make this evening a success -- the more
machines, the more demos, the more inter-
esting the evening.

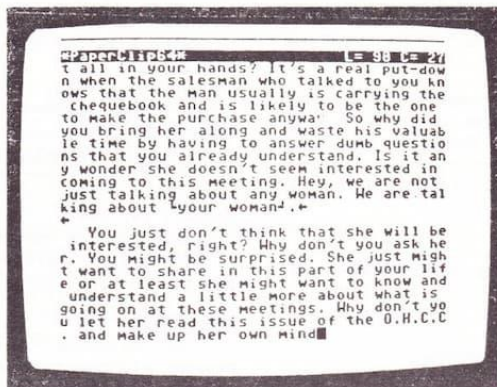
MINUTES--NOVEMBER & DECEMBER MEETINGS

The November 'Rummage/Swap Night' was a
resounding success. Apparently the classi-
fied ads run in *The Citizen* entitled "Com-

puter Flea Market" were the key to drawing out the largest crowd in recent history. I talked to several people who came away happy with the purchases they had made, and most sellers at least sold something.

The December meeting featured reports on the World of Commodore show (which sounds

like the best-ever in terms of bargains), and a question-and-answer period where members of the executive fielded the questions. Several ideas for future programs were suggested, with the most obvious being a night about printers (several questions were asked about how to get 'such-and-such printer to do something'). ■



PHOTOGRAPHING THE COMPUTER SCREEN II

by Bob Mason

I was taken off-guard at the meeting last month when one of the audience (I believe it was Helenia) suggested that the Newsletter contained inaccurate facts; specifically, the complaint was that when the instructions for 'photographing the screen' were followed, the result was a black blur.

As editor, I feel some responsibility for ensuring that the information I print is correct, and yet I do not have the time to check every statement, especially those of a more technical nature. In this case, I was dealing with an author whose credentials were impeccable.

My initial reaction was to doubt the complainant, whose credentials were unclear. Better, I decided, to run my own test. So I followed the steps exactly as set out in the article:

- 35 mm camera with a focal plane shutter
- set on a tripod 24 inches from screen

- I didn't have a cable release
- I didn't adjust the brightness of the screen
- I used a cheapo ASA-100 colour film
- I set the exposure at 1/8 second
- I shot the screen using several F-stop settings, as recommended in the article

An example of my results is printed above. Please note that this is a printed reproduction of a black-and-white photocopy of a colour photographic print; each step lowers the final quality. I have the actual photographs for anyone to see, and these include game screens as well as the simple word processing (my family was impressed with the clarity of the reproductions).

Photographing the screen is not a project I would have engaged in blindly. Serge's suggestions for adjusting monitor brightness and F-stop settings would have given me a perfect reproduction, and allowed me perfect reproductions in the future.

Helenia, I think you owe Serge an apology.

Financial Report

Dues to rise in 1987!

by Bob Mason and Mike Bryan

The following is a Financial Statement for the Ottawa Home Computing Club for the four month period July 31-Nov. 30, 1986.

OPENING BANK BALANCE	\$5,365.52	
July 31, 1986		
INCOME		
Software sales	\$4,149.00	
Membership fees	930.00	
Bank interest	33.72	
Telephone refund	21.75	
TOTAL	\$10,499.99	\$10,499.99

EXPENSES		
Supplies, duplication of disks	\$2,419.50	
Printing of Newsletter and envelopes	2,472.44	
Stamps (to mail Newsletter)	590.96	
Telephone installation and charges	233.15	
Insurance (liability)	500.00	
Rental of school	546.00	
Bank charges	63.00	
Supplies	104.88	
TOTAL	6,929.93	\$6,929.93

CLOSING BANK BALANCE	\$3,570.06
Nov. 30, 1986	

The present cost of the Newsletter, per member, is:

Printing	\$ 2.57
Envelop	0.12
Label	0.01
Stamp	0.51
	3.21

Cost per member per year	
(3.21 x 10)	\$32.10

The above presents a rather startling picture, on two fronts. First, our bank

balance is decreasing; second, the cost of the Newsletter is not being covered by the membership fee.

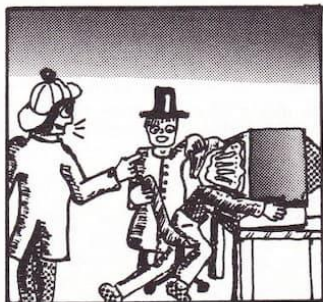
We are presently trying to reduce to the cost of the Newsletter on two fronts: we are soliciting advertising (with some success, though not overwhelming); and second, we are investigating the sales tax position and may be able to reduce the tax paid on printing.

Nevertheless, these changes will not turn around the general trend, and therefore the executive has decided to raise the membership dues from \$15 to \$20 per year. This is still lower than most other computer clubs in the area, and balanced, we feel, by an improved Newsletter, increased club activity (supporting the new Commodore and Apple computers, the TV show, publicizing meetings, etc.).

The change in membership fees takes place January 1, 1987.

ZERO PAGE

BY
VOJTA
FRYZEK



IT LOOKS LIKE MURDER.
HE'S BEEN GLUED TO THE
TUBE



FOR LADIES ONLY

FROM THE PROGRAM COORDINATOR

WAYNE D. SCHALER



So why should I go to the "Women and the Home/Office Computer" Night when I don't even like computers?

Good question! Perhaps if you have some patience with me and read the rest of this article, I'll be able to answer the question.

Chances are you feel that the computer is an expensive toy that you really didn't need and besides it has failed to live up to its billing of being the final solution to mankind's every need. You're probably right. However, the computer is here to stay so you're going to have to deal with it. When we are confronted with a device that is as insidious and inevitable as the computer, we simply cannot ignore it. We MUST try to come to grips with it and make it serve us like we did with every other kind of household and/or office device.

Remember the first time you heard about the dreaded "Microwave" that was going to zap everybody with gamma radiation. Now most households either have or want to have one. People have come to grips with a machine that cooks their food with radio waves. The computer is guaranteed to be far more useful in the home than any microwave could ever become although its usefulness will not be accepted quite as quickly.

Let us deal with a few myths and facts. First, you don't have to know how to write programs to operate a computer; although it is an interesting part of the computer, knowing programming is unlikely to make you more effective in its use. Yes, you can apply the technology of the computer to your home today without making extravagant expenditures or taking extensive courses in technology, but the more you learn about it, the wiser you are going to be about its uses. The next time a salesman tries to sell you a new computerized widget (that almost everybody else already has) you can come to the club and ask someone about it, someone who won't ridicule you for not knowing all the answers, no matter how trivial your questions may seem to you.

Computers are used today in the schools with your children. They process the bills that you receive every day from a multitude of companies and utilities (yes, I have heard all the jokes about these dumb computers). The automated teller machine at the bank is simply a terminal linked to a main-frame computer. Many of the grocery checkout cashiers use a computer to print out what you bought and how much it cost, and also keeps inventory for the store managers at the same time. Many of you use data entry terminals and word processors at work, which are, in some cases, less versatile than the computer you have at home.

The list of day-to-day activities controlled by computer, both at home and at work, is enormous. The potential usage today and in the future, especially in the home, is limited only by our imagination and our willingness to adapt.

So I am not telling some of you anything new, right! Well, how about the fact that the membership that your spouse has in the O.H.C.C. is a family membership and that you can come to any meeting and ask questions or simply take in the program? How about the fact that any member or non-member can attend the upcoming meeting free-of-charge. How about the fact that we will provide a free, supervised VCR movie room (for this meeting) for the kids so that you may enjoy the evening in peace? How about the opportunity to meet the women who will be giving half-hour talks on a variety of topics, in a no-pressure, no-hassle environment. How about the fact that if you don't attend this meeting when you have the opportunity, you will be passing up one of the few chances around to become better informed.

Why don't you come at 7:30 p.m. on January 19, 1987. This will give you a chance to put the kids in the movie room, get a good seat, and meet some of the other women before the meeting starts. By the way, this is a very informal and casual affair, and you should come relaxed. I won't dress up if you don't. ■



FOR MEN ONLY

FROM THE PROGRAM COORDINATOR

WAYNE D. SCHALER



So why should I bring the lady of my life to the "Women and the Home/Office Computer" Night when she doesn't even like computers?

Good question! And I have the unenviable responsibility of trying to answer it.

Where should I start.

How about sharing? You know that bit about sharing the good times. Despite the frustrations that you have from time to time, you know that you enjoy tinkering with the one-eyed monster. There is a sense of fascination and adventure as you deal with the technology that is changing the way we communicate with each other. Are you going to leave here behind while you travel into the 21st century of technology? If you do, you are forgetting a promise that you made not so long ago and the price of failing to communicate this time might be grave indeed.

But she doesn't even like or accept computers, right!... You can hardly expect her to be supportive if you don't even give her the opportunity to see for herself.

Sure I know you took her down to the computer shop where she showed little interest and she said she would rather have been somewhere else anyway, right! You bent over backwards for her, trying to explain about the importance of the computer and she either wouldn't listen or just became frustrated and labelled it an expensive game machine just like the ones down at the arcade. The only advantage she saw was that at least you or the kids weren't dropping coins in the machines and she knew where everybody was, now that it was in the home. You tried to get her interested and she said quite plainly that she wasn't interested.... Sound familiar? I mean you really tried, right?

Wrong. When you bought the computer, for whatever reason, you researched it by reading, or at least talking to friends,

and even then you felt pretty stupid when you talked to a salesman who knew what he was doing and used all sorts of high tech talk to impress you. How do you think she felt when you or someone else last tried to explain some of her questions or to answer some of her concerns.

Can you blame her for not wanting to admit that she wasn't up on the latest technical terms and concepts or understand why it was necessary to spend so much money? Can you understand why she left it all in your hands? It's a real put-down when the salesman who talked to you knows that the man's usually carrying the cheque-book and is likely to be the one to make the purchase anyway. So why did you bring her along and waste his valuable time by having to answer dumb questions that you already understand. Is it any wonder she doesn't seem interested in coming to this meeting. Hey, we are not just talking about any woman. We are talking about **your woman**.

You just don't think that she will be interested, right? Why don't you ask her. You might be surprised. She just might want to share in this part of your life or at least she might want to know and understand a little more about what is going on at these meetings. Why don't you let her read this issue of the O.H.C.C. and make up her own mind. But don't let it end there. Try to encourage her to come to this specific meeting and if then she is still not interested, you can at least say that you tried.

If you think that she is being unreasonable about you and the time you spend at the computer now, just imagine how she'll feel on some future date when she learns that a special night was held to introduce her to the many facets of the computer, and you didn't even tell her about it. ■

Programming Music in Three Voices (pt. III)

by Bob Handforth

A third method for programming music in three voices on the C-64 is described in the book titled simply *The Commodore 64 Music Book*, written by James Vogel and Nevin B. Scrimshaw. I must admit that the method described in this book is my own favorite one, since it seems to offer the best combination of effectiveness and simplicity.

The book was published in 1983 and was part of a software package which included a cassette tape of all the program examples described in the book, plus a few additional ones. I have had the cassette contents transcribed to disk, and I've found that reading a description of the program analysis while listening to the sound has been quite helpful and instructive.

In these reviews it has occasionally been necessary to refer to frequency numbers, as well as to high- and low-frequency numbers. These are different from the actual frequencies of notes which are measured as the number of cycles per second for any given pitch.

In the eight-octave range inherent in the SID chip, actual frequencies range from 16 CPS (note "C" in octave "0") to 3952 CPS ("B" in octave "7"). To make these values more compatible with the C-64's capabilities and limitations, each of these 96 frequencies is divided by the constant .06097. This results in a series of frequency numbers ranging from 268 (just above the lower limit of 256) to 64814 (just below the upper limit of 65536). The high- and low-frequency numbers are derived from the frequency numbers by using the familiar formula:

$$HF\% = FN/256; LF\% = FN - 256 * HF\%$$

This produces a corresponding series of high-frequency numbers ranging from 1 to 253, with the low-frequency numbers being

the remainders after each division operation.

The method described in the *Commodore 64 Music Book* uses the frequency numbers themselves as data entries, and the program instructs the computer to break them down into the low- and high-frequency numbers. This means that two items are required as data for each note -- the frequency number and the duration value. A "rest" in the music is simply indicated by two values -- "0" which means no sound is intended, and a duration value to indicate the length of the silence. Two zeros (no sound and no duration) mark the end of the data for each voice. With only two data entries per note, less data is required than in the Butterfield Driver Program, but more than in the complex "one-number" system described in the *Programmer's Reference Guide*.

The principle which provides the flexibility and independence for each voice is basically the same as the one employed in the *Programmer's Reference Guide* program. There are three arrays, one dimensioned to hold all the high-frequency numbers, one to hold all the low-frequency numbers, and one to hold the duration values. The voice flexibility is achieved through the use of a short loop. A sixteenth-note needs only one pass through the loop, an eighth-note two passes, etc.

The first pass of each duration value opens the gate which remains open until the last pass which closes the gate and turns off the note. The voice data is read in, one voice at a time. It is these operations which cause the delay for set-up time before the music is heard. The breakdown of frequency numbers into their low and high components actually causes no delay. This procedure for achieving voice flexibility, appears to be the principal method, if not the only one, used by most other systems.

This program uses a separate counter for each voice to record successive duration

values. Since each counter compiles the number of sixteenth-notes as they accumulate while the music is playing, any of them can be used to manipulate sprites to accompany the music. This might tend to slow down the music to some degree, but a tempo loop can sometimes be adjusted to allow for this. I have found sometimes that by selecting music with a tempo which is not too rapid, and programming it to play more rapidly for sprite manoeuvring, and at the same time for allowing the music to play at a suitable rate of speed.

Many tunes, particularly popular songs, often have lines or sections which are repeated a number of times. The book's authors illustrate a way in which repeated

portions of the music may be entered as data values only once, but which still allows those portions to be re-read and replayed. Their description, however, uses only a one-voice tune as an example. They claim that the same procedure can be applied to three-voice music, but up to now I have not been able to make it work successfully for three voices.

Except for Jim Butterfield's 'immediate music' method, this three-voice program needs less RAM than the other methods. Also, (except for the Butterfield system) it requires much less set-up time than either the program advocated by the *Programmer's Reference Guide* or by the fourth and last system, which I hope to review next (March issue maybe). ■

C-64 GAME DESIGN

Twenty-fifth of a series

by John Batchelor

I don't know if this is such a good idea. I am about to commit myself in print to the thorough development of a C-64 game in a series of articles for this newsletter. I think it will be a great topic but I'm not sure that I can make all the implied deadlines. The game better turn out worthwhile, too!

Here we go. Let's look at the idea I wrote about in Game Design #22 in the October '86 issue of *Ottawa Home Computing*. The scenario involves two players and offers them chances to cooperate or be selfish. In October, I had the players taking jewels from a dike. They could work together to make patches and share the loot. Or, they could grab the jewels for themselves and leave a leak. The leaks would shorten the time available for jewel collection for both players.

I think I will update this to have space prospectors salvaging parts from an abandoned alien space station. Unless the gaps created by the scavenging are braced through teamwork, the structure will collapse before the prospectors normally would have run out of air and had to return to their own ship.

To make this interesting, let's set some targets. There will be custom characters, background music, multicolour sprites and two scrolling screens so that each player can have his or her own view. We will use machine language for smoothness and speed, of course. Even compiled BASIC couldn't do the screen scrolling. Because this game tests human personalities, there will be no single player option. I should conform to my etiquette pronouncements about including instructions and a single file to load without relocation or SYS calls to re-member.

Now for a tentative schedule (SHUDDER):

February	-- custom characters
March	-- playfield design
April	-- sprites
May	-- music
June	-- memory layout
July	-- scrolling and animation
August	-- play logic
September	-- initialization and restart
October	-- instructions.

There, a perfect nine-month gestation period.

Actually, I may get it done earlier but it will probably require that many articles to describe the process. I will try to use tools that are in the public domain or in the popular magazines. Feedback on the usefulness of my commentary and suggestions on the game itself are always welcome. Perhaps this could be a small session at the next "games night". ■

COMMODORE 128

HINTS, TIPS AND TRICKS
COMPILED BY P. NICKLESS

1.3

C128 Data Statements- When typing in DATA statements you can use the C128's AUTO feature and programmable function keys. When you're ready to enter the line number of the first DATA statement, enter in DIRECT mode, KEY 1, "DATA":KEY 3, " ":AUTO(line-number increment) and press the RETURN key.

C128 Lo-Res Screen Dump- Use this subroutine to create hard copies of screen displays. It works in both 40- and 80-column modes, and even does windows!

```
10 REM C128 SCREEN DUMP
20 OPEN 3,3:OPEN 4,4,7,CHR$(13):PRINTCHR$(19);
30 FOR Y=0TORWINDOW(0)
40 IF RWINDOW(2)=40THEN PRINT#4,CHR$(14);
50 FOR X=0TORWINDOW(1)
60 GET#3,A#:A=ASC(A#)
70 IF(AAND127)>31 THEN PRINT#4,A#;
80 NEXTX:PRINT#4,CHR$(13)
90 NEXTY:CLOSE3:CLOSE4
```

C128 Hi-Res Screen Dump- This 40-column mode program doesn't do windows. However it does perform accurate screen dumps of both standard and multicolour bit-map screens.

```
100 REM C128 HIRES SCREEN DUMP
115 IFRGR(X)>2THEN MODE=159:ELSE MODE=319
120 OPEN 3,4:FOR Y=0 TO 199 STEP 7
130 PRINT#3,CHR$(15);SPC(10);CHR$(8);
140 FOR X=0 TO MODE:CH=0:FORM=0 TO 6
150 LOCATE X,Y+M:IF RDOT(2)>0 THEN CH=CH+2
    CUP ARROWJM
155 NEXT
160 CH=CH OR 128:A#=#A#+CHR$(CH):PRINT#3,A#;
    :A#="":NEXTX
170 PRINT#3,CHR$(8):NEXTY:CLOSE3:END
```

Easier Loading 1571- When running unprotected C128 programs in a 1571 disk drive, you may have noticed that the disk drive sometimes has trouble finding the program you want to run. The problem is that in 128 mode, the 1571 has difficulty reading programs written in single-sided format. If you make a copy of your unprotected software onto a 1571 double-sided format, you will have much smoother and faster loads. This works well with the autobooters, too. Try copying your 1571 test/demo disk using the double-sided format and watch how fast DOS Shell loads.

40/80 Display Switching- although it's not mentioned in the manual, the 40/80-display key is read whenever the STOP and RESTORE keys are pressed. So, to switch from one mode to the other, just set the display key, then tap the STOP and RESTORE keys.



To the Editor:

In connection with the recent article *Building a Surge Suppressor* by John Foster, a similar article was published in *Byte* magazine, December, 1983, by Steve Giarca. Later issues (June and July, 1984) gave some possible replacement parts.

For the MOVs (the article suggests Radio Shack 276-570 or GE V130LA10A) equivalents are Panasonic ERZ-C14DK201, General Instrument S14K130, and GE V130LA20A may also be used. Possible power line filters (which Radio Shack no longer stocks) include Corcom 5VK1 5A, Corcom 5VB1, Corcom 5VB3, Cornell-Dubilier APF511L, Delta Electronics Q5DBAG5, and Potter Co. 600A5.

Also, I have been using an M1 Mouse, from Contriver Technology, in conjunction with GEOS 1.2. The maximum velocity and acceleration have to be reduced considerably, which is accomplished with the 'INPUT DRIVER' dialogue within GEOS.

BEWARE! I had some problems when typing in a BASIC program, which vanished after disconnecting the mouse.

Jim Greenstreet

* * *

Editor's Reply: This letter is like a

breath of fresh air -- someone is reading these articles, and adding information to them. Fantastic!

You don't know how I mulled over these articles, going to Canadian Tire and Radio Shack, phoning electronics stores, to make sure the parts were available. And the places I checked were not all that willing to suggest equivalents.

Since I couldn't find a power line filter, I didn't print the installation instructions. And since I haven't seen one, I can only reprint the directions from the article. "... solder the three leads [from the power cord] to the three leads on the line end of the filter. Install three MOVs on the duplex receptacle [one of the power bar outlets]. Use the black and white leads [cut from a piece of extension cord] to connect the duplex receptacle to the filter. Assemble the plug box."

The filters suggested are 600 watts (5 amps at 120 volts). Make sure that what you plug into the power strip does not exceed this wattage. The article suggests that an Apple II or Mac, Imagewriter, HD20 and modem require less than 300 watts. Commodore documentation is sparse, but a 1571 disk drive and 1902 monitor require 100 watts max. A computer and printer should be another 100 watts. Modems don't require a lot, but 300 watt light bulbs, coffee makers and the likes are out of the question.

In relation to mice (or is it mouses, or mices (as in 'I hate you mices to pieces?')). I was treated to a demonstration of the 1531 mouse at Lynx the other day. Beautiful -- compared to the 1530. They're selling the 1531 with a GEOS 1.3 update for \$60 (while supplies last). ■



which machine you have, so that you can be given the proper disk.

Several people noticed that the club got a mention in a recent 'Brown's Beat' column in *The Citizen*. That was when several members of the club took their computers over to the Children's Hospital, and let some of the kids use the computers for the afternoon. Well, we'd like to do it again, and are looking for volunteers willing to spend a Saturday afternoon for a good cause -- the kids really appreciated it last time. If you're interested, contact any member of the executive.

One little note that members with modems might find interesting -- there is now an on-line data base of career openings. The ad says "Browse freely through scores of current computing science, engineering, management and professional careers from North America's leading organizations. Simply dial your local public Datapac port [in Ottawa 567-9100] and key in 20400637. Who knows what you might discover?"

Finally, Commodore's Customer Support section is trying to get their act together. There has been a lot of criticism leveled at this section in the past, with letters to some of the magazines claiming to get absolutely no response when they phoned West Chester. Pete Baczor is attempting to reestablish the section's credibility by putting out a monthly mailing to

all user groups. The mailing has a listing of dates and events, product news, helpful tips, etc.

In the last mailing, there was a suggestion that they may publish a guide to Commodore Computers, including a section of common questions asked by people new to Commodore products. Pete asks that anyone interested in helping out send their questions and answers to him. I have the address and pertinent information for anyone interested.

An interesting inclusion in the package was information on making a hardware change of the device number of various Commodore disk drives and printers (1541, 2031, 2040, 4040, 8050, 8250, 9060 and 9090 drives, 1515, 1520, 1525, 1526, MPS 801 and 802 printers). I found it interesting because Commodore has been very hesitant to make this information available, hoping to discourage people from opening up their equipment, thereby voiding the warranty. Anyway, I have this information on file for anyone who is interested.

A special thanks to Vojta Frysek, who has been submitting cartoons for a few months now, and whose art adorns the front cover this month. Keep up the good work, Vojta!

All the best to all of you in the New Year, and I hope at least some of you resolved to write an article for the *Newsletter*.



We Need Newsletter Staff!

Have you wanted to get involved in the Newsletter but felt you didn't have the expertise to write an article or even review a game? There are several positions open which require no special knowledge, only the willingness to do some work. There are no monetary rewards but I offer my personal guarantee, for that it's worth, that your gains in knowledge and experience will be priceless.

Position	Duty
Ad Manager	To contact potential advertisers, prepare ad artwork, and bill advertisers.
Assistant Editor	To help with production of the newsletter, filling in where needed, and taking over production once in a while.
Apple Editor	To prepare an "Apple News" column and ensure that feature articles of interest to Apple users are included in the Newsletter.
Commodore Editor	To prepare a "Commodore News" column and ensure that feature articles of interest to Commodore users are included in the Newsletter.
Features Editor	To ensure that feature articles on the themes of Upcoming Meetings are available for publication.
Disk Printer	To investigate publishing the Newsletter on a disk, complete with graphics. This would include production of trial issues, surveying users, assessing cost effectiveness and possible production problems.

If you are interested in trying out any of the above positions, or getting involved in the Newsletter in some other way, give me a call (home 837-3197, work 564-5040). There'll be a meeting of interested people January 26, at 7:30, at my place to: 1) put together the February Newsletter and 2) talk about where the Newsletter should go. Phone for directions.

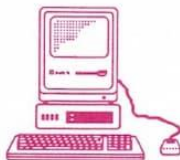
C64 Disk of the Month Retail Sales

The C-64 Disk of the Month is carried at the stores listed below. It sells for about \$4.50 and is available two days after each meeting.

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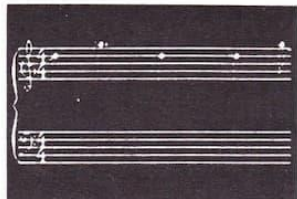
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